

जलसंपदा विभागातील नवनियुक्त सहायक अभियंता श्रेणी -२ (यांत्रिकी) व कनिष्ठ अभियंता (यांत्रिकी) यांच्या सेवाप्रवेशोत्तर प्रशिक्षण कार्यक्रमाबाबत

महाराष्ट्र शासन
जलसंपदा विभाग
शासन परिपत्रक क्रमांक. संकिर्ण/२०१५/ प्र.क्र. १३०/१५/यांत्रिकी
मादाम कामा रोड, हुतात्मा राजगुरु चौक,
मंत्रालय, मुंबई-४०० ०३२
दिनांक: २९ फेब्रुवारी २०२४

वाचा:-

मुख्य अभियंता (यां), जलसंपदा विभाग, नाशिक यांचे पत्र क्र.मुअयां/तां०८/१४५३/२०२३, दि.१७/०५/२०२३.

परिपत्रक :-

वरील विषयाबाबत संदर्भाधीन पत्रान्वये प्राप्त झालेल्या नवनियुक्त सहायक अभियंता (यांत्रिकी) श्रेणी -२ / कनिष्ठ अभियंता (यांत्रिकी) यांच्या खालीलप्रमाणे सेवाप्रवेशोत्तर प्रशिक्षण अभ्यासक्रमास शासन मान्यता देण्यात येत आहे.

प्रशिक्षण कार्यक्रमाचे नाव :- Training Program for Newly Recruited Assistant Engineer Grade २ (Mechanical) and Junior Engineer (Mechanical)

अ.क्र.	विषय	कालावधी
A	Basic Training	
1	WRD Organisation Structure	2 weeks (10 Working Days)
2	Rules Duties and Responsibilities of AE II & JE	
3	MPW Manual	
4	General working of the department	
5	RTI and RTS	
6	MCSR 1981	
	1) Conduct Rules	
	2) Discipline & Appeal Rule	
	3) Leave Rule	
	4) Pay Rule, NPS	
	5) Departmental Enquiry	
	6) Maharashtra Public Works Manual, Writing of CR	
	7) Service Book & E-Service Book	
7	Work Account Part 1	
	1) Different Types of Form (Form 1 to Form 110)	
	2) submission of work account to AG Nagpur	
	3) Different types of cashbook(work cashbook, main cashbook, EGS, Imprest cashbook)	

अ.क्र.	विषय	कालावधी
B	Earth work	
1	Construction of Dam walls & Canals, Cut off Trench	
2	Introduction of various types of Earth moving machineries excavators loading & Carting Equipments, Hauling Equipments, Rolling equipments. Specification, capacities and Selection Criteria for Above Machineries	
3	Operation, maintenance & Repair of Excavators & Hydraulic System in Excavator	
4	Operation, maintenance & repair of loaders and dozers & Transmission System.	
5	Operation, maintenance & repair of Compactors, Dumpers and allied machineries	
6	Maintenance of batteries, specification of tyres & Batteries, purchase indents for tyres and batteries	
7	Purchase of spare parts & repairs- detailed procedure	
8	Troubleshooting, Gear box, Front and Rear Axle, Brake System, Electrical System in Excavator & Auto Vehicle, Use of OBD, Hydraulic Pump, Hydraulic Motor, Hydraulic Ram, Master Control Valve, Pilot Control System	
9	Machinery calculation required for particular site(i.e. Earthwork and canal cleaning), Cycle Time, Output and machinery requirement for earthwork	
10	Earthwork site visit	
11	BEML, Tata Hitachi Executive Lecture	
12	Different types of boring methods and tools, its necessity	
13	Site Visit- Earthen Dam (Major)	
14	Site Visit- MI Tank/ Desilting of Tank or Drinking Water Storage of Village	
15	Site Visit - Canal Cleaning/ Desilting of River	
		3weeks (15 Working Days)
C	Gate	
1	Types of Dams, Categories of dam	
2	Types of Gates , Classification of Gates	
3	Standard size of Radial gates & Outlet gate	
4	Components of Radial Gates	
5	Trash Rack, Quick closing Gate, Draft Tube Gate	
6	Manufacturing Process & Sequence of Erection with Secondary Concreting	
7	Stop Log Gates	
8	Vertical Lift Gates (Barrages)	
9	Automatic Gates & it's principle.	
10	Quality Control Inspection During Manufacturing & After Manufacturing	
11	Material used for manufacturing of different gates	
12	Outlet Gate- Components of Emergency Gate & Service Gate, Hydraulic Gate, Air vent , Bypass arrangement for Gate Balancing.	
13	Embedment leaf & it's material	
14	Manufacturing Process & Sequences, stage inspection during manufacturing of outlet gates	
15	Different types of Hoist, Hoist components, Goliath crane	
		3weeks (15 Working Days)

अ.क्र.	विषय	कालावधी
16	Hoist Design standard Hoist capacity for radial gates & outlet gates, stage inspection during assembly of hoisting arrangement	
17	Welding types & Joints	
18	Erection of Gates & Hoist	
19	Gate operation schedule & Reservoir operation schedule	
20	Pre & Post Monsoon Inspection of Dam & MI Tank	
21	Maintenance & Repair of Gate	
22	Case Study of Panshet Dam Failure	
23	Different components of irrigation outlet & Irrigation cum power outlet	
24	Erection, Inspection and maintenance of Ic & ICPO, Y-Piece, Transition Zone	
25	Inspection of Dam Gates & Dam Safety Act	
26	Hoisting arrangement of power outlet and ICPO & its capacity and Erection	
27	Visit to Mechanical Organization workshop and Quality Control Lab	
28	Site Visit (Major Project)	
29	Site Visit (Medium Project & MI Tank)	
D	LIS	
1	Importance and Necessity of LIS	3week (15 Working Days)
2	Site Selection	
3	Various Types of Pumps , head losses, sequence of valves provided on rising main, terms related to pump house, NPHSA, Thoma coefficient	
4	Components of LIS(Electrical +Mechanical), Sump design, model study of sump, Different types of layout criteria governing the lay out (Pump House Layout)	
5	Selection of different types of pumps to suit different layouts, rating curves & efficiency of pumps operation, inspection & maintenance of pump, Velocities Triangles for existing pump, VFD	
6	Selection of types of rising mains & manifold including study of economical diameter of rising main and their supporting structure, Thick pipe & Thin pipe Design, NDT for rising mains & Inlet manifold	
7	Criteria Governing design of rising main	
8	Planning & Conceptual design of LIS, Case study of LIS Project	
9	Selection & Design of motor & It's Allied Electrical Equipments	
10	Economics of LIS	
11	Water hammer phenomenon in rising mains, surge analysis, its interpretation, different types & selection of antisurge arrangements.	
12	Preparation of Project report of LIS, Govt orders regarding feasibility of the scheme of management	
13	Operation, maintenance & Repair of LIS	
14	EOT Crane	
15	Preparation of estimate electrical & mechanical components according to various CSR & DSR	
16	Site Visit (HSC Pump+ VT pump+ Submersible Pump and Accessories)-2 days	

अ.क्र.	विषय	कालावधी
E	Execution Of work	
1	DTP Preparation, Various types of Tender, clauses of B1 tender, registers	1 week (5 Working Days)
2	Measurement book, Work accounting	
3	Store Management (forms , registers, Hard Data Storage Rules, MSA, Outstanding amounts from Civil Authority.)	
4	Inspection by Vigilance Department and Finance Department, CE office, SE Office and Division office	
5	Evaluation and survey report of machinery (Life of machinery, depreciation calculation, valuation, form 32 and 37)	
6	Preparation of survey report, authority approving survey report	
7	Auction and E auction of machinery, detail procedure	
8	Registers to be maintained in Technical Section (Estimate Register, Non DSR Sanction Register)	
9	Debit Memo Preparation, Proforma Part I & III, OM & R of Machinery.	
F	Miscellaneous and Computers	
1	Introduction to website of the Department	1 week (5 Working Days)
2	M. S. Excel (intermediate advance)	
3	Auto CAD & Case study for Transition Zone	
4	Office work procedure	
5	Online APAR (MAHAPAR), Income tax calculation	
6	GeM	
7	E- beams (Equipment & Budget Expenditure & Earnings Management System) + LIMICS	
8	Concept of E-Jalseva, Pravah Pranali Software System	
G	Soft Skill Development	
1	Correspondence to Government	2 weeks (10 Working Days)
2	Personality Development	
3	Communication Skills	
4	Value Education, Morals and ethical working	
5	Time and stress management	
6	Joyful living	
7	Co-relation of work and life	
H	Training Assessment/ End of Training Examination/ and Concluding Ceremonies	1 week (5 Working Days)

- Total 16 week program at META, Nashik and Regional Training Centres
- One Assignment on each module A to F shall be given
- Online End of Training Exam
- Professional Exam will be as per Rules

सदर शासन परिपत्रक महाराष्ट्र शासनाच्या www.maharashtra.gov.in या संकेतस्थळावर उपलब्ध करण्यात आला असून त्याचा सांकेतांक २०२४०२२९१३०१२३८८२७ असा आहे. हा आदेश डिजीटल स्वाक्षरीने साक्षात्कृत करून काढण्यात येत आहे.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नावाने.

(वि. चि. गुंबाडे)

अवर सचिव, महाराष्ट्र शासन

प्रत-

१. अ.मु.स. , जलसंपदा विभाग, यांचे स्वीय सहायक, मंत्रालय, मुंबई.
२. सचिव (प्रकल्प समन्वय), जलसंपदा विभाग, यांचे स्वीय सहायक, मंत्रालय, मुंबई.
३. सचिव (लाक्षेवि), जलसंपदा विभाग, यांचे स्वीय सहायक, मंत्रालय, मुंबई.
४. मुख्य अभियंता (यांत्रिकी), जलसंपदा विभाग, नाशिक.
५. उपसचिव (मोप्र.१) यांचे स्वीय सहायक, जलसंपदा विभाग, मंत्रालय, मुंबई.
६. उपसचिव (लाक्षेवि) यांचे स्वीय सहायक, जलसंपदा विभाग, मंत्रालय, मुंबई.
७. उपसचिव प्रशा, जलसंपदा विभाग, मंत्रालय, मुंबई.
८. अधीक्षक अभियंता व सहसंचालक, महाराष्ट्र अभियांत्रिकी प्रशिक्षण प्रबोधिनी, (मेटा), नाशिक.
९. कक्ष अधिकारी, आ (स.अ.श्रेणी-२) जलसंपदा विभाग, मंत्रालय, मुंबई.
१०. कक्ष अधिकारी, आ (तांत्रिक) जलसंपदा विभाग, मंत्रालय, मुंबई.
११. कार्यकारी अभियंता तथा प्राचार्य, प्रादेशिक प्रशिक्षण केंद्र (यांत्रिकी), सांगवी, पुणे
१२. यांत्रिकी संग्रहार्थ.